				STANDBY CURRENT (AMPS)		ALARM CURRENT (AMPS)		PANEL FA (6808) SUMMARY REPORT
	QTY	PART NO	DESCRIPTION	CURRENT DRAW (A)	TOTAL (A)	CURRENT DRAW (A)	TOTAL	
	1	6808 Main Board	Main Board	1 x 0.19	= 0.19	1 x 0.25	= 0.25	
	CIRCUIT							
	L1			1 x 0.024655	= 0.024655	1 x 0.429655	= 0.429655	
	N1			1 x 0	= 0	1 x 0.094	= 0.094	
	N4			1 x 0.014	= 0.014	1 x 0.014	= 0.014	
	SBUS+			1 x 0.02	= 0.02	1 x 0.025	= 0.025	
				TOTAL STANDBY CURRENT	0.248655	TOTAL ALARM CURRENT	0.812655	

						STANDBY CURRENT		ALARM CURRENT		POINT-TO-POINT VOLTAGE DROP CALCULATION SUMMARY		
CIRCUIT	QTY	PART NO	DEVICE SETTING	CIRCUIT LENGTH	CIRCUIT RESISTANCE (Ω/ft)	CURRENT DRAW (A)	TOTAL (A)	CURRENT DRAW (A)	TOTAL (A)	STARTING CALCULATION VOLTAGE	END OF LINE VOLTAGE	VOLTAGE DROP
L1	22	DNR w/SK-PHOTOHR-W		2504'	0.00489	22 x 0.0002	= 0.0044	22 x 0.0045	= 0.099			
	1	SK-HEAT-ROR-W w/B300-6				1 x 0.0002	= 0.0002	1 x 0.0045	= 0.0045			
	1	SK-MONITOR				1 x 0.0004	= 0.0004	1 x 0.0055	= 0.0055			
	1	SK-MONITOR-2				1 x 0.00075	= 0.00075	1 x 0.00075	= 0.00075			
	70	SK-PHOTO-W w/B300-6				70 x 0.0002	= 0.014	70 x 0.0045	= 0.315			
	6	SK-PULL-DA				6 x 0.00035	= 0.0021	6 x 0.00035	= 0.0021			
	11	SK-RELAY				11 x 0.000255	= 0.002805	11 x 0.000255	= 0.002805			
N1	1	P2GRKLED	110cd	203'	0.00307	1 x 0	= 0	1 x 0.094	= 0.094	20.4v	20.28v	0.12v
N4	1	HPF-PS10		80'	0.00307	1 x 0.014	= 0.014	1 x 0.014	= 0.014	20.4v	20.39v	0.01v
SBUS+	1	6808R		202'	0.00777	1 x 0.02	= 0.02	1 x 0.025	= 0.025			

					PROVIDE (2) 12V 12AH BATTERIES @ 24VDC
		REQUIRED STANDBY TIME = 24 HOURS			
		REQUIRED ALARM TIME = 15 MINUTES			
	SECONDARY STANDBY LOAD	0.248655	x 24	= 5.97 AH	
	SECONDARY ALARM LOAD	0.812655	x 0.25	= 0.2 AH	
	STANDBY AND ALARM LOAD SUBTOTAL			6.17 AH	
	DERATING FACTOR			x 1.25	
	SECONDARY LOAD REQUIREMENTS (AMP HOURS)			7.71 AH	

				STANDBY CURRENT (AMPS)		ALARM CURRENT (AMPS)		PANEL NAC1 (HPF-PS10) SUMMARY REPORT PANEL POWER SUPPLY MAX CURRENT = 10A TOTAL USED CAPACITY = 4.247A (42.47 %)
	QTY	PART NO	DESCRIPTION	CURRENT DRAW (A)	TOTAL (A)	CURRENT DRAW (A)	TOTAL	
	1	HPF-PS10 MAIN BOARD	Fire Alarm Power Supply Main Board	1 x 0.156	= 0.156	1 x 0.185	= 0.185	
	CIRCUIT							
	N1			1 x 0	= 0	1 x 0.812	= 0.812	
	N2			1 x 0	= 0	1 x 1.115	= 1.115	
	N3			1 x 0	= 0	1 x 0.8	= 0.8	
	N4			1 x 0	= 0	1 x 0.784	= 0.784	
	N5			1 x 0	= 0	1 x 0.41	= 0.41	
	N6			1 x 0	= 0	1 x 0.141	= 0.141	
				TOTAL STANDBY CURRENT	0.156	TOTAL ALARM CURRENT	4.247	

						STANDBY CURRENT		ALARM CURRENT		POINT-TO-POINT VOLTAGE DROP CALCULATION SUMMARY		
CIRCUIT	QTY	PART NO	DEVICE SETTING	CIRCUIT LENGTH	CIRCUIT RESISTANCE (Ω/ft)	CURRENT DRAW (A)	TOTAL (A)	CURRENT DRAW (A)	TOTAL (A)	STARTING CALCULATION VOLTAGE	END OF LINE VOLTAGE	VOLTAGE DROP
N1	1	P2RLED	75cd	338'	0.00307	1 x 0	= 0	1 x 0.087	= 0.087	20.4v	19.38v	1.02v
	2	PC2RLED	177cd			2 x 0	= 0	2 x 0.19	= 0.38			
	3	SCRLED	177cd			3 x 0	= 0	3 x 0.115	= 0.345			
N2	3	P2RLED	75cd	448'	0.00307	3 x 0	= 0	3 x 0.087	= 0.261	20.4v	19.85v	1.55v
	3	PC2RLED	177cd			3 x 0	= 0	3 x 0.19	= 0.57			
	2	SCRLED	177cd			2 x 0	= 0	2 x 0.115	= 0.23			
	3	SRLED	15cd			3 x 0	= 0	3 x 0.018	= 0.054			
N3	3	PC2RLED	177cd	359'	0.00307	3 x 0	= 0	3 x 0.19	= 0.57	20.4v	19.19v	1.21v
	2	SCRLED	177cd			2 x 0	= 0	2 x 0.115	= 0.23			
N4	2	P2RLED	75cd	427'	0.00307	2 x 0	= 0	2 x 0.087	= 0.174	20.4v	18.93v	1.47v
	2	PC2RLED	177cd			2 x 0	= 0	2 x 0.19	= 0.38			
	2	SCRLED	177cd			2 x 0	= 0	2 x 0.115	= 0.23			
N5	1	P2RLED	75cd	197'	0.00307	1 x 0	= 0	1 x 0.087	= 0.087	20.4v	20.11v	0.29v
	1	PC2RLED	177cd			1 x 0	= 0	1 x 0.19	= 0.19			
	1	SCRLED	177cd			1 x 0	= 0	1 x 0.115	= 0.115			
	1	SRLED	15cd			1 x 0	= 0	1 x 0.018	= 0.018			
N6	1	P2RLED	75cd	53'	0.00307	1 x 0	= 0	1 x 0.087	= 0.087	20.4v	20.36v	0.04v
	3	SRLED	15cd			3 x 0	= 0	3 x 0.018	= 0.054			

					PROVIDE (2) 12V 7AH BATTERIES @ 24VDC
		REQUIRED STANDBY TIME = 24 HOURS			
		REQUIRED ALARM TIME = 15 MINUTES			
	SECONDARY STANDBY LOAD	0.156	x 24	= 3.74 AH	
	SECONDARY ALARM LOAD	4.247	x 0.25	= 1.06 AH	
	STANDBY AND ALARM LOAD SUBTOTAL			4.81 AH	
	DERATING FACTOR			x 1.25	
	SECONDARY LOAD REQUIREMENTS (AMP HOURS)			6.01 AH	

DANIEL D'SOUZA
NICET LEVEL IV
LICENSE # 137828
EXPIRES: 04-01-2026

△	DATE	DESCRIPTION
	01.27.26	PERMIT SET

STRONGHOLD FIRE PROTECTION
17404 MERIDIAN EAST, SUITE F PMB #136
PUYALLUP, WA 98375
(253) 385-0112
Lic. # STRONFP777PW

FIRE ALARM SYSTEM FOR:
BEST BUY
4102 S. MERIDIAN SUITE A
PUYALLUP, WA 98375

FIRE ALARM SYSTEM CALCS

DATE:	01.27.26
DRAWN BY:	DPS
CHECKED BY:	DCD
SCALE:	3/32"=1'-0"

SHEET:
FA-4